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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,779	07/24/2003	Yoshihiro Nonaka	02-222291	8192

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EXAMINER

CUNNINGHAM, TERRY D

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,779

Applicant(s)

NONAKA, YOSHIHIRO

Examiner

Terry D. Cunningham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-20 is/are allowed.
- 6) ☒ Claim(s) 11-13 and 15 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11-13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Ellis et al. (USPN 5,606,491). Ellis discloses, in Figs. 1-2, a circuit comprising: “a pair of input terminals (24 and 25)”; “a charge capacitor (36)”; “a first pair of switches (40 and 44)”; “a first output capacitor (46)”; “a second pair of switches (42 and 50)”; “a second output capacitor (26)”; “third pair of switches (52 and 66)”; and “a load (connected to output terminals 22 and 25), all connected and operating similarly as recited by Applicant. Capacitor 36 is connected (Fig. 1) by to the “input terminals” 24 and 25 by switches 40 and 44, capacitor 46 is connected (Fig. 2) to the “first serial combination” of the “charge capacitor” 36 and the “input terminals” 24 and 25 by switches 42 and 50 and capacitor 26 is connected (Fig. 1) to the “second serial combination” of the “charge capacitor” 36 and the “first output capacitor” 46 by switches 52 and 66.

With respect to claim 12, it is clear that the “load” is connected in parallel with capacitor 46 by way of intervening elements.

Examiner has fully considered Applicant’s remarks for the above rejection and has not found them to be persuasive. Contrary to Applicant’s remarks, one skilled in the art would have found it more than reasonable to consider capacitor 46 as an “output capacitor” since such is used for boosting the output. Further, Examiner finds no basis for Applicant’s discussion that

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the “large size” transistors are in any way in contradistinction to “thin film transistor”. One skilled in the art would have been well aware of the fact that referring to a transistor as a “large size” generally refers to a large current conducting capability, not whether or not such is “thin film”. Further, Examiner points out that one skilled in the art would have been well aware of the fact that the term “thin film transistor” is a term used in a general sense in the art not relating to a specific range of transistor film thickness. In other word, since the term “thin film” is would not be known to one skilled in the art as conveying a specific limitation, the term is seen to lack relativity. Clearly, the transistors used in the reference to Ellis would be deemed “thin film” is reference to some other arbitrary transistor.

Allowable Subject Matter

Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 14 would be allowable because the reference to Ellis as will, as the remaining cited art, fails to disclose the charge pump further including plural loads having the recited connections.

Claims 16-20 are allowable because the reference to Ellis as will, as the remaining cited art, fails to disclose the charge pump including more than two “output capacitors” and the corresponding “boosting switches”.

Conclusion

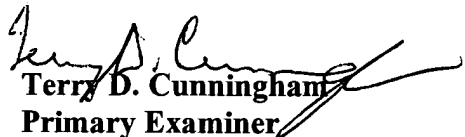
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 571-272-1742. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC
January 12, 2005


Terry D. Cunningham
Primary Examiner
Art Unit 2816